

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 September 2005 (09.09.2005)

PCT

(10) International Publication Number
WO 2005/081672 A2

(51) International Patent Classification: Not classified

(21) International Application Number:
PCT/US2004/002637

(22) International Filing Date: 30 January 2004 (30.01.2004)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **INTERNATIONAL BUSINESS MACHINES CORPORATION** [US/US]; TJ Watson Research Center, 1101 Kitchawan Road, P.O. Box 218, Yorktown Heights, NY 10598 (US).

(74) Agent: **HERZBERG, Louis, P.**; International Business Machines Corporation, 1101 Kitchawan Road, P.O. Box 218, Yorktown Heights, NY 10598 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

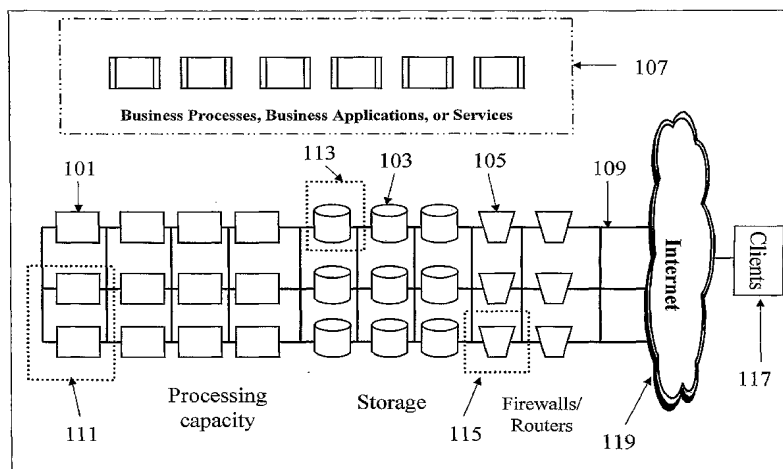
(71) Applicants and

(72) Inventors: **EILAM, Tamar** [US/US]; 200 W. 109 Street, Apr B6, New York, NY 10025 (US). **HUNT, Guernsey, D.** [US/US]; 31 Wellington Court, Yorktown Heights, NY 10598 (US). **MILLER, Sandra, D.** [GB/GB]; 15 Canute Road, Winchester, Hampshire SO23 0PW (GB). **MUMMERT, Lily, B.** [US/US]; 18 Dreps Drive, Mahopac, NY 10541 (US).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: COMPONENTIZED AUTOMATIC PROVISIONING AND MANAGEMENT OF COMPUTING ENVIRONMENTS FOR COMPUTING UTILITIES



(57) Abstract: The present invention provides systems, methods and apparatus for automatically provisioning and managing resources in a computing utility. Its automation procedures are based on a resource model which allows resource-specific provisioning and management tasks to be encapsulated into components for reuse. These components are assembled into more complex structures and finally computing services. This invention provides a method for constructing a computing service from a set of resources given a high level specification. Once constructed, the service includes a component that provides management function, which can allow modification of its underlying set of resources.

WO 2005/081672 A2



Declaration under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *without international search report and to be republished upon receipt of that report*